



2812  
#7/IDS  
Dking  
10/31/01

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on October 11, 2001.

Signature: \_\_\_\_\_

*Richard A. Baumgartner*

RECEIVED  
OCT 18 2001  
PATENT  
TC 2800 MAIL ROOM

Attorney Docket No. **NTI-019-2**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application )

PATENT APPLICATION

Inventor(s): Christophe Pierrat et al. )

Art Unit: 2812

Application No.: 09/675,197 )

Examiner: unknown

Filed: 09/29/2000 )

Title "Dissection Of Edges With Projection Points In A )  
Fabrication Layout For Correcting Proximity )  
Effects )

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Listed below or on an attached Form PTO-1449 is information known to applicant(s). A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP § 609.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56.

- ☒ This statement qualifies under 37 C.F.R. § 1.97, subsection (b) because (check all that apply):
- ☐ (1) It is being filed within 3 months of the application filing date and is other than a continued prosecution application under § 1.53(d)  
-- OR --
  - ☐ (2) It is being filed within 3 months of entry of a national stage  
-- OR --
  - ☒ (3) It is being filed before the mail date of the first Office Action on the merits.  
-- OR --
  - ☐ (4) It is being filed before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114
- ☐ 37 C.F.R. § 1.97(c). If this statement is being filed after the period specified in § 1.97(b), but before the mailing date of the earlier of a final office action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, then:
- ☐ a certification as specified in § 1.97(e) is provided below; **or**
  - ☐ a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☐ 37 C.F.R. § 1.97(d). If this statement is being filed after the period specified in § 1.97(c), but on or before payment of the issue fee, then:
- A. a certification as specified in § 1.97(e) is completed below; **and**
  - B. a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☐ *Fee Authorization.* The Commissioner is hereby authorized to charge the above-referenced fees of \$ 180 and charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0574 (Docket No. NTI-019-2).

Respectfully submitted,

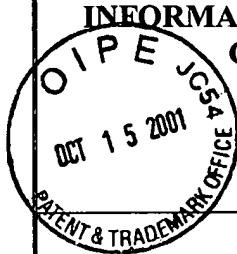
BEVER, HOFFMAN & HARMS, LLP

Dated: 10-11-01

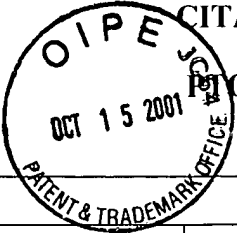
By:   
Jeanette S. Harms, Reg. No. 35,537

Telephone: (408) 451-5907  
Customer No. 29477

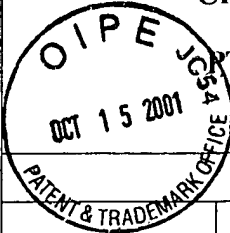
#7105.  
D/King  
10/31/81

<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b>			ATTY. DOCKET NO. NTI-019-2		SERIAL NO. 09/675,197	
			APPLICANT Pierrat, et al.			
			FILING DATE 9/29/00		GROUP 2812	
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4,231,811	11/4/80	Somekh, et al.	148	1.5	9/13/79
	4,456,371	6/26/84	Lin	355	71	6/30/82
	4,902,899	2/20/90	Lin, et al.	250	492.1	6/1/87
	5,498,579	3/12/96	Borodovsky, et al.	437	250	6/8/94
	5,553,274	9/3/96	Liebmann	395	500	6/6/95
	5,636,002	6/3/97	Garofalo	355	53	10/31/95
	5,663,017	9/2/97	Schinella, et al.	430	5	6/7/95
	5,663,893	9/2/97	Wampler et al.	364	491	5/3/95
	5,723,233	3/3/98	Garza, et al.	430	5	2/27/96
	5,766,806	6/16/98	Spence	430	5	9/9/96
	5,821,014	10/13/98	Chen, et al.	430	5	2/28/97
	5,862,058	1/19/99	Samuels, et al.	364	491	5/16/96
	5,879,844	3/9/99	Yamamoto, et al.	430	30	12/20/96
	5,885,734	3/23/99	Pierrat, et al.	430	5	8/15/96
	5,900,338	5/4/99	Garza, et al.	430	5	8/15/97
	5,994,002	11/30/99	Matsuoka	430	5	9/4/97
	6,004,702	12/21/99	Lin	430	5	5/21/98
	6,077,310	6/20/00	Yamamoto, et al.	716	19	1/29/99
	6,078,738	6/20/00	Garza, et al.	395	500.22	5/8/97
EXAMINER			DATE CONSIDERED			


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE</b> <b>CITATION</b>  <b>PTO-1449</b>			ATTY. DOCKET NO.		SERIAL NO.		
			NTI-019-2		09/675,197		
			APPLICANT Pierrat, et al.				
			FILING DATE 9/29/00		GROUP 2812		
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	3-210560	9/13/91	JP			<input type="checkbox"/>	<input type="checkbox"/>
	8-236317	9/6/96	JP			<input type="checkbox"/>	<input type="checkbox"/>
	10-133356	5/22/98	JP			<input type="checkbox"/>	<input type="checkbox"/>
	11-143085	5/28/99	JP			<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
EXAMINER			DATE CONSIDERED				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b>  	ATTY. DOCKET NO. NTI-019-2	SERIAL NO. 09/675,197
	APPLICANT Pierrat, et al.	
	FILING DATE 9/29/00	GROUP 2812
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>		
	Ackmann, P. et al., "Phase Shifting And Optical Proximity Corrections To Improve CD Control On Logic Devices In Manufacturing For Sub 0.35 $\mu$ m I-Line", Advance Micro Devices (8 pages).	
	Asai, N. et al., "Proposal For The Coma Aberration Dependent Overlay Error Compensation Technology", <i>Jpn. J. Appl. Phys.</i> , Vol. 37, pp. 6718-6722 (1998).	
	Chen, J.F. et al., "Full-Chip Optical Proximity Correction With Depth Of Focus Enhancement", <i>Microolithography World</i> (1997).	
	Chen, J.F. et al., "Optical Proximity Correction For Intermediate-Pitch Features Using Sub-Resolution Scattering Bars", MicroUnity Systems Engineering, Inc., Sunnyvale, California, pp. 1-16.	
	Chen, J.F., et al., "Practical Method For Full-Chip Optical Proximity Correction", MicroUnity Systems Engineering, Inc., Sunnyvale, California (14 pages).	
	Garofalo, J. et al., "Automated Layout Of Mask Assist-Features For Realizing 0.5k <sub>1</sub> ASIC Lithography", <i>SPIE</i> , Vol. 2440, pp. 302-312 (1995).	
	Garofalo, J. et al., "Automatic Proximity Correction For 0.35 $\mu$ m I-Line Photolithography", <i>IEEE</i> , pp. 92-94 (1994).	
	Garofalo, J. et al., "Mask Assisted Off-Axis Illumination Technique For Random Logic", <i>J. Vac. Sci. Technol. B</i> , Vol. 11, No. 6, pp. 2651-2658, November/December 1993.	
	Gotoh, Y. et al., "Pattern Dependent Alignment Technique For Mix-And-Match Electron-Beam Lithography With Optical Lithography", <i>J. Vac. Sci. Technol. B</i> , Vol. 16, No. 6, pp. 3202-3205, November/December 1998.	
	Harafuji, K. et al., "A Novel Hierarchical Approach For Proximity Effect Correction In Electron Beam Lithography", <i>IEEE</i> , Vol. 12, No. 10, pp. 1508-1514, October 1993.	
	Lin, B.J., "Methods To Print Optical Images At Low-k <sub>1</sub> Factors", <i>SPIE</i> , Optical/Laser Microlithography III, Vol. 1264, pp. 2-13 (1990).	
	Pierrat, C. et al., "A Rule-Based Approach To E-Beam And Process-Induced Proximity Effect Correction For Phase-Shifting Mask Fabrication", <i>SPIE</i> , Vol. 2194, pp. 298-309 (1994).	
	Precim, "Proxima System", Precim Company, Portland, Oregon (2 pages).	
EXAMINER		DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b>  	<b>ATTY. DOCKET NO.</b> NTI-019-2	<b>SERIAL NO.</b> 09/675,197
	<b>APPLICANT</b> Pierrat, et al.	
	<b>FILING DATE</b> 9/29/00	<b>GROUP</b> 2812
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>		
	Saleh, B. et al., "Reduction Of Errors Of Microphotographic Reproductions By Optimal Corrections Of Original Masks", <i>Optical Engineering</i> , Vol. 20, No. 5, pp. 781-784, September/October 1981.	
	Spence, C. et al., "Integration Of Optical Proximity Correction Strategies In Strong Phase Shifters Design For Poly-Gate Layers", <i>Bacus News</i> , Vol. 15, Issue 12, pp. 1, 4-13, December 1999.	
<b>EXAMINER</b>	<b>DATE CONSIDERED</b>	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.